

VCU Discrete Mathematics Seminar

Graph recoloring

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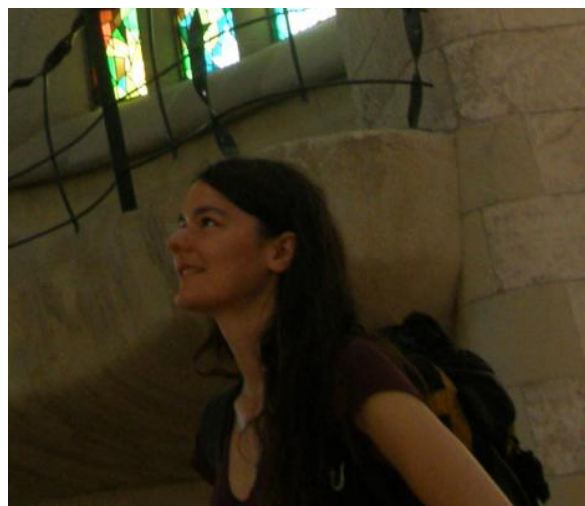
Thursday, April 9

12:30–1:20

4145 Harris Hall

A proper k -coloring of a graph is an assignment of one color to each vertex such that no two adjacent vertices have the same color, and at most k different colors are used on the whole graph. Given two proper k -colorings of a graph G , is there a way to recolor G from one coloring to the other while recoloring one vertex at a time and ensuring that G is always properly k -colored? In how many steps?

We will present various conditions on the pair (G,k) for this to be possible in few steps. We consider in particular graphs with no long induced path and graphs with no long induced cycle. This is based on joint work with Nicolas Bousquet (McGill University).



For more information on our exciting Spring 2015 schedule, see:
<http://www.people.vcu.edu/~dcranston/DM-seminar/>